

ABSTRACT

A method for consolidating nanophase metal powder includes the steps of consolidating the powder by applying pressure to the powder at a first temperature, encompassing the powder with a flowable pressure transmitting medium that is heated to a second temperature that is higher than the first temperature, and compressing the heated medium and thereby further consolidating the powder. The first consolidating step may include encompassing the nanophase metal powder with a flowable pressure transmitting medium that is heated to the first temperature, and compressing the heated medium at the first temperature.